US Army Corps
of Engineers
Alaska District

BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

US Army Corps of Engineers
Alaska District

BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

- PROJECT OVERVIEW
- CONSTRUCTION CHALLENGES AND KEYS TO SUCCESS
- CONSTRUCTION PROJECT OFFICE STAFFING
- AE RESPONSIBILITY / LIABILITY
- CONSTRUCTION CLOSE-OUT / WARRANTY

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

PROJECT OVERVIEW

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FT. WAINWRIGHT, ALASKA AK

2002 → 2006

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA

AK

PROJECT SCHEDULE

- Dec 2000 Complete Site Development Project
- 19 Feb 02 Award Facility Constr. Contract
- May 02 Begin Facility Construction
- Aug 04 Award IM-IT Construction Contract
- Apr 05 Complete IM-IT Construction
- Nov 05 Projected Early Completion Date
- 17 June 06 Contract Completion Date
- Nov 06 Award Demolition Contract
- Aug 07 Demolition Complete

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

Description: Replacement Hospital

Scope: 269,000 s.f.

- State of the art healthcare facility
- Three main floors, two IBS, crawlspace and mechanical penthouses:
  - 1st - Out-patient
  - 2nd - In-patient
  - 3rd - Administrative
- Project is divided into four major phases:
  - Site Preparation (Complete)
  - Vertical Construction
  - Communications Equipment
  - Demolition of existing facility and adjacent admin bldg. 4069

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

PROJECT STATUS

- Construction placement to date is $29 million which represents 17 % of the contract amount ($178.5 million).
- Contractor is currently projecting an early completion date between Sept and November 2005.
- Steel and concrete for the Central Energy Plan and Clinic wing were completed in 02 and Mechanical and Electrical work in these areas is continuing throughout the winter.
- Structural steel is 28% complete, concrete is

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

PROJECT STATUS (cont.)

- Steel erection and concrete placement for the remainder of the facility will be completed during the summer of 03.
- A total of 202,500 man-hours have been worked to date.
- A total of 14 cases have been established to include 4 approved Value Engineering Proposals. Estimated cost growth exposure to date is less than $24,000 (.013%).
- Web cams are set-up to view real time project activities online at

Architect’s model of new hospital

Computer rendering of main entrance.

Computer rendering of main entrance interior.

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

Resource Center Central Core

"Wave Corridor" Specialty Clinic Wing

- Design tailored to cultural, social and geographic setting
- Intent is to provide an aesthetic and climate responsive
  open space

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

Typical patient bedroom.

Typical LDRP

- Promote a healthy community and self-managed care
- Support new model of healthcare

Project Location.
Looking South from Birch Hill

Site Preparation Contract.
Looking North toward the Chena River.
September 2000

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FT. WAINWRIGHT, ALASKA AK

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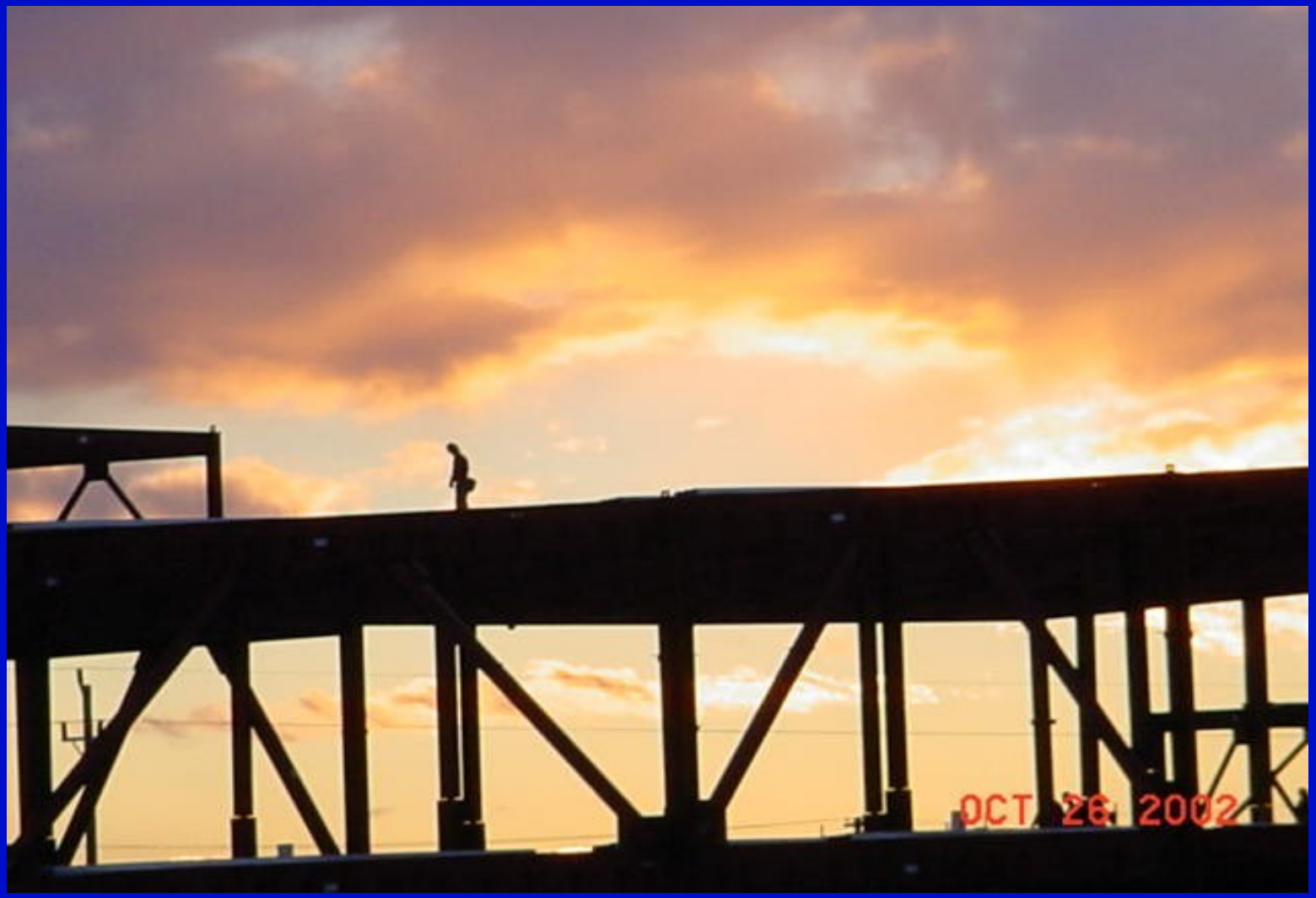
FT. WAINWRIGHT, ALASKA AK



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Alaska District

BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

CONSTRUCTION CHALLENGES AND KEYS TO SUCCESS

US Army Corps
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Alaska District

BASSETT ARMY REPLACEMENT HOSPITAL EARTHQUAKES

AK

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

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BASSETT ARMY REPLACEMENT HOSPITAL
UNIQUE SAFETY CONCERNS

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BASSETT ARMY REPLACEMENT HOSPITAL
VOLCANOES

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BASSETT ARMY REPLACEMENT HOSPITAL LOGISTICS

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BASSETT ARMY REPLACEMENT HOSPITAL COLD WEATHER

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BASSETT ARMY REPLACEMENT HOSPITAL
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BASSETT ARMY REPLACEMENT HOSPITAL
VERY COLD WEATHER

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

Project Delivery Team/Partnership

Partnering Process: Creating a working Delivery Team that includes all stakeholders is critical to the success of the project. This should be started at the earliest phases of design and continue throughout Construction and through the Warranty period.

Design Process
- Quarterly PDT Meetings
- Lessons Learned
  - Sole Source Requirements/Challenges
    - Glass
    - Controls
    - Fire Detection System
  - Submittals/Design Extensions
  - Construction Phase Services

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

- Construction Process
  - Lessons Learned
    - Specification Revisions
      - GA vs. FIO
      - QC/PE Requirements
      - Coordination Drawings
    - 3-Month Look Ahead
    - Construction Phase Services
      - On-Site Representation
      - Site Visits
  - Change Management Process

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Alaska District

BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

CONSTRUCTION PROJECT OFFICE STAFFING

US Army Corps of Engineers
Alaska District

BASSETT ARMY REPLACEMENT HOSPITAL PROJECT OFFICE ORGANIZATION CHART

AK

Bassett Resident Office

Health Facility Project Office

Ken Larson
Resident Engineer (USACE)

Roger Green
Project Manager (USACE)

MAJ Kent Koger
Chief, HFPO

Alvinia Quarles
Secretary/Admin Asst.

Mikk Sepp
A/E Design Consultant

Sharon Poland
Administrator/Dep Transition

LTC Chuck Lazarus
Nurse Methods Anaylist

Dawn Davids
Admin Clerk

John Schuman
Chief, Construction Branch

Rolf Ness
Chief, Engineering Branch

John Bristow
Chief, Transition Branch

CPT Ross Davidson
Chief, Technical Branch

Duane Dahl
Construction Rep.
Randy Meitner
Electrical Eng.
Tony Valente Construction Rep
Larry Flemming
Construction Rep
Jerry Holland
Construction Rep. Paul Park Mechanical Eng.

Greg Wilcox Architect
Erik Hursh Mechanical Eng.
Vacant Civil Eng. (Struc)
E. Brockman CE Tech.
Vacant Negotiator
Tracy Speed
Office Auto. Clerk
Victoria Santiago Architect (F/C)
Vacant Structural

Don Kelley Equip Planner
VACANT
Logistics
Joan McInerney
IM/IT

Dan Gerdes
Engineer Tech

AS OF 29 JAN 03

US Army Corps of Engineers
Alaska District

BASSETT ARMY REPLACEMENT HOSPITAL PROJECT OFFICE BUDGET

AK

#	Position AS OF 30 JAN 2003	2000				2001				2002				2003				2004				2005				2006			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Res Engr, LARSON, 14/8				61,745	58,200	58,200	58,200			59,773	59,773	59,773	61,566	61,566	61,566	61,566	63,704	63,704	63,704	63,704	65,315	65,315	65,315	65,315	67,275	67,275	67,275	67,275
2	Admin Asst, PART TIME, 9/4						23,842				25,472				26,236				27,147				27,834						
3	Admin Sec, QUARLES, 6/6						19,875	19,875	19,875	20,472	20,472	20,472	20,472	21,086	21,086	21,086	21,086	21,818	21,818	21,818	21,818	22,370	22,370	22,370	22,370	23,041	23,041	23,041	
4	Const Br Chf, SCHUMAN,13/7				50,840	47,918	47,918	47,918	47,918	49,356	49,356	49,356	49,356	50,837	50,837	50,837	50,837	52,602	52,602	52,602	52,602	53,933	53,933	53,933	53,933	55,550	55,550	55,550	
5	Con Rep QA, VALENTE, 11/8														30,000	40,296	40,296	41,695	41,695	41,695	41,695	42,750	42,750	42,750	42,750				
6	CETech/Schdlr,MURPHY,12/3														31,000	43,653	43,653	45,169	45,169	45,169	45,169	46,312	46,312	47,701	47,701	49,132	49,132	49,132	49,132
7	ME, QA, PARK, 12/4												15,768	40,296	40,296	40,296	40,296	41,695	41,695	41,695	41,695	42,750	42,750	44,032	44,032				
8	EE, QA, MEITNER, 12/5											32,718	42,534	42,534	42,534	42,534	42,534	44,011	44,011	44,011	44,011	45,125	45,125	46,478	46,478				
9	Con Rep QA, HOLLAND, 11/9				38,641	34,554	34,554						36,422	37,514	37,514	37,514	37,514	38,817	38,817	38,817	38,817	39,799	39,799	39,799	39,799				
10	Con Rep QA, DAHL, 12/6											40,352	40,352	41,563	41,563	41,563	41,563	43,006	43,006	43,006	43,006	44,094	44,094	44,094	44,094	45,417	45,417	45,417	
11	Con Rep QA,FLEMMING,11/8												35,591	36,659	36,659	36,659	36,659	37,932	37,932	37,932	37,932	38,891	38,891	38,891					
12	Engr Br Chf, NESS, 13/7										49,356	49,356	49,356	50,837	50,837	50,837	50,837	52,602	52,602	52,602	52,602	53,933	53,933	53,933	53,933	55,550	55,550	55,550	
13	CE Negotiator, VAC, 12/4															40,352	40,352	41,753	41,753	41,753	41,753	42,809	42,809	42,809	42,809	44,094	44,094	44,094	44,094
14	CE Tech, BROCKMAN, 9/4												22,244	27,023	27,023	27,023	27,023	27,961	27,961	27,961	27,961	28,669	28,669	28,669	28,669	29,529	29,529	29,529	29,529
15	Ofc Auto Clrk, SPEED, 4/1												6,778	17,321	17,321	17,321	17,321	17,923	17,923	17,923	17,923	18,376	18,376	18,927	18,927				
16	CE Strol, Eng Br, VAC, 12/6															41,505	41,505	42,946	42,946	42,946	42,946	44,032	44,032						
17	ME, Eng Br, Hursh, 12/2											13,727	36,894	40,296	40,296	40,296	40,296	41,695	41,695	41,695	41,695	44,032	44,032	44,032	44,032	45,353			
18	Architect, Eng. Br, VAC, 12-6														30,000	41,505	41,505	42,946	42,946	42,946	42,946	44,032	44,032	44,032	44,032	45,353			
19																													
20	Note: Wages reflect an increase of 3% per year																												
21																													
	COE Quarterly Sum Exp				151,226	140,672	184,389	125,993	67,793	69,828	204,428	265,754	415,540	467,531	584,767	674,842	674,842	698,275	725,422	698,275	698,275	717,221	745,054	677,764	638,873	460,294	369,588	369,588	190,030
	COE Yearly Sum Exp				151,226				518,847				955,549				2,401,981				2,820,248				2,778,912				1,389,499
	AE Construction Phase Services = $1,225,107 + $2.8M(Est)					5,000			0	0	0	57,652	232,868	253,150	253,150	253,150	253,150	253,150	253,150	253,150	253,150	253,150	253,150	253,150	253,150	253150	253150	253150	248119
	Note: To be split 50% S&A & 50% Contingency!																												
	COE Exp Annual Total:																												
	= Yearly Sum Exp * constant 110.00%				166,349				570,732				1,051,104				2,642,179				3,102,272				3,056,803				1,528,449
	AE ConPhsSvcs (Annual)				0				5,000				290,540				1,012,600				1,012,600				1,012,600				1,007,569
	Construction Placement (Annual)				3,848,000				300,000				23,919,189				83,200,000				60,800,000				25,000,000				10,000,000
	Income: S&A * constant 6.50%				250,120				19,500				1,554,747				5,408,000				3,952,000				1,625,000				650,000
	Income: above figure * constant 88.50%				221,356				17,258				1,375,951				4,786,080				3,497,520				1,438,125				575,250
	(PM 8%, EN 1%, CT 2.5%) 11.50%				28,764				2,243				178,796				621,920				454,480				186,875				74,750
	COE + AE CPS Yearly Total Expense				166,349				575,732				1,341,644				3,654,779				4,114,872				4,069,403				2,536,018
	G&A = 28.30%																												
	Overhead = 48.00%																												
	Construction Placement per FTE				3,848,000				92,308				3,543,584				5,367,742				3,524,638				1,515,152				1,176,471
	Number of FTE's per Calendar Year				0.75				3.25				6.75				15.50				17.25				16.50				8.50
	(Income: S&A*constant) - (COE+A CPS Yearly Total)				83,771				-556,232				213,103				1,753,221				-162,872				-2,444,403				-1,886,018
	NET S&A YEAR TO YEAR ACCUMULATION				83,771				-472,460				-259,357				1,493,864				1,330,992				-1,113,411				-2,999,429

AS OF 30 JAN 2003

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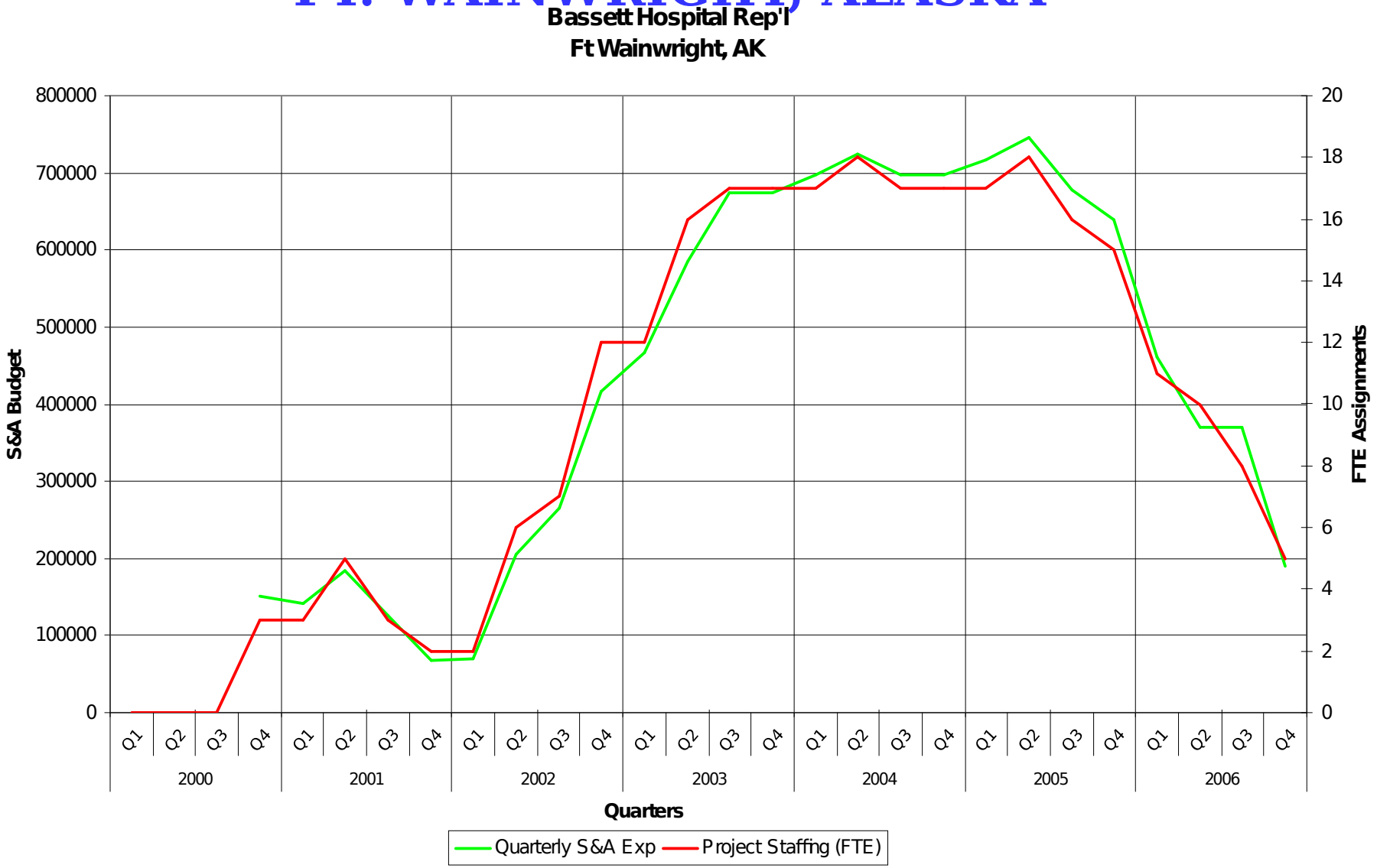
FT. WAINWRIGHT, ALASKA AK



AE RESPONSIBILITY / LIABILITY

US Army Corps of Engineers
Alaska District

BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

FAR 52.236-23 provides that the A-E is responsible for the professional quality, technical accuracy and the coordination of all designs, drawings, specifications and other services provided under the contract. Government review, approval, acceptance of, or payment for services does not absolve this responsibility.

FAR 36.608 defines the responsibility of the Contracting Officer for pursuing Potential A-E liability whenever a construction contract modification or change order results from an error or omission in design drawings, specifications or other services furnished by the A-E. The A-E is obligated to make the necessary corrections to the design at no cost to the Government.

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

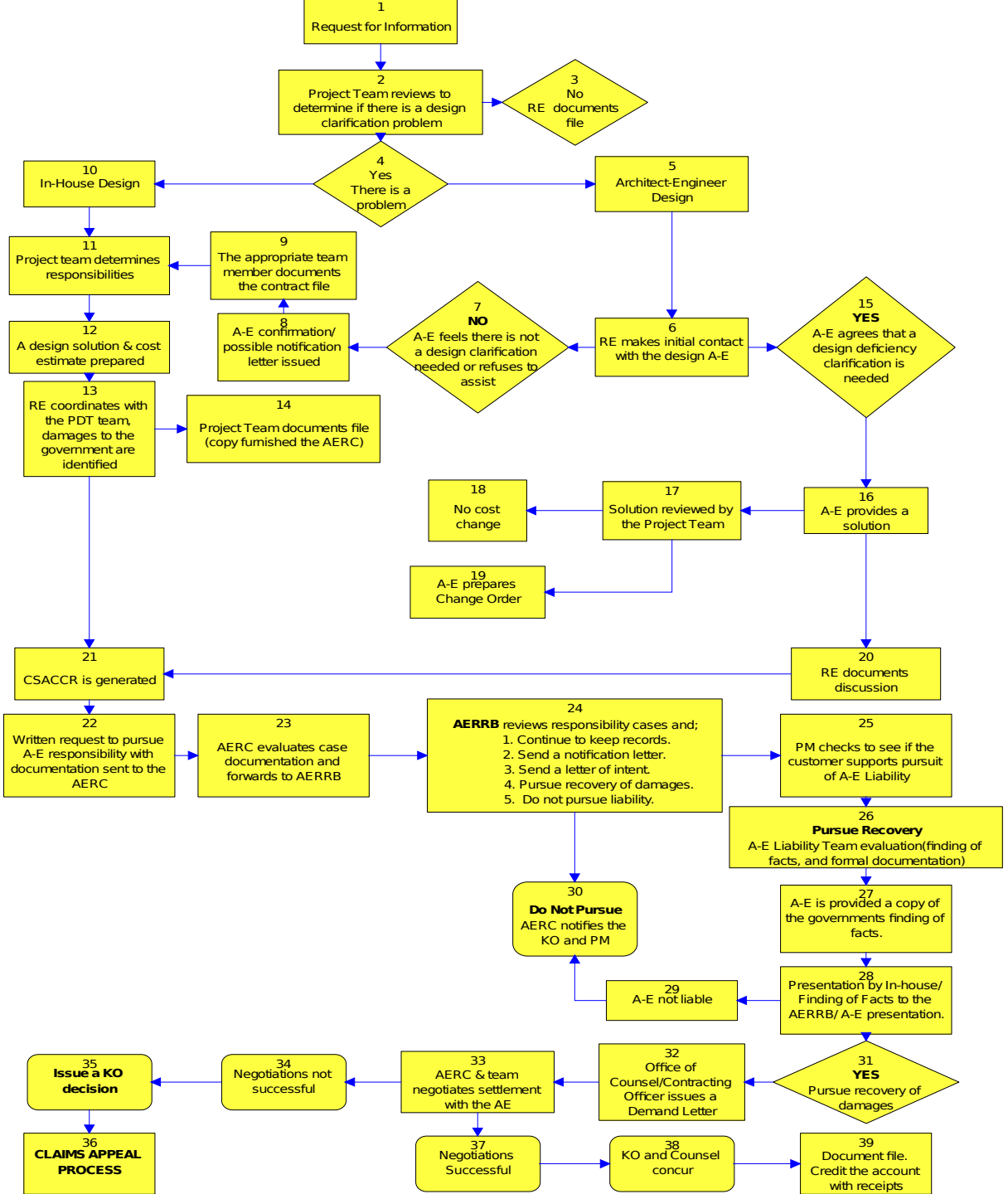
The point at which the A-E is notified of a design deficiency will vary depending on the particular circumstances of the case. As a general rule, the A-E should be involved immediately and offered an opportunity to review the design deficiency and propose its correction.

US Army Corps of Engineers
Alaska District

BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

RECOMMENDATIONS FOR MEDICAL FACILITIES:

- Hire the design firm to provide Construction Phase Services for the duration of the construction contract. This will be funded with both S&A and Design During Construction (contingency) funds.
- An AE team member should be co-located in the Project Office. This has worked extremely well for Bassett.
- The COR for the AE contract should also be co-located in the Project Office.
- A multi-disciplined AE team make frequent visits to the site (a minimum of one visit each quarter – more frequent as needed).


1
Request for Information
2
Project Team reviews to determine if there is a design clarification problem
3
No
RE documents file
4
Yes
There is a problem
10
In-House Design
5
Architect-Engineer Design
11
Project team determines responsibilities
9
The appropriate team member documents the contract file
12
A design solution & cost estimate prepared
8
A-E confirmation/ possible notification letter issued
7
NO
A-E feels there is not a design clarification needed or refuses to assist
6
RE makes initial contact with the design A-E
15
YES
A-E agrees that a design deficiency clarification is needed
13
RE coordinates with the PDT team, damages to the government are identified
14
Project Team documents file (copy furnished the AERC)
18
No cost change
17
Solution reviewed by the Project Team
16
A-E provides a solution
19
A-E prepares Change Order
21
CSACCR is generated
20
RE documents discussion
22
Written request to pursue A-E responsibility with documentation sent to the AERC
23
AERC evaluates case documentation and forwards to AERRB
24
AERRB reviews responsibility cases and;
1. Continue to keep records.
2. Send a notification letter.
3. Send a letter of intent.
4. Pursue recovery of damages.
5. Do not pursue liability.
25
PM checks to see if the customer supports pursuit of A-E Liability
26
Pursue Recovery
A-E Liability Team evaluation(finding of facts, and formal documentation)
30
Do Not Pursue
AERC notifies the KO and PM
27
A-E is provided a copy of the governments finding of facts.
29
A-E not liable
28
Presentation by In-house/ Finding of Facts to the AERRB/ A-E presentation.
35
Issue a KO decision
34
Negotiations not successful
33
AERC & team negotiates settlement with the AE
32
Office of Counsel/Contracting Officer issues a Demand Letter
31
YES
Pursue recovery of damages
36
CLAIMS APPEAL PROCESS
37
Negotiations Successful
38
KO and Counsel concur
39
Document file. Credit the account with receipts

US Army Corps
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Alaska District

ELMENDORF AFB COMPOSITE MEDICAL FACILITY

AK

US Army Corps
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Alaska District

ELMENDORF AFB COMPOSITE MEDICAL FACILITY

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BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

CONSTRUCTION CLOSE-OUT / WARRANTY

US Army Corps of Engineers
Alaska District

BASSETT ARMY REPLACEMENT HOSPITAL
FT. WAINWRIGHT, ALASKA AK

Construction Warranty Process

Turnover Planning Document
3- Month Transition Period
Approval of SOMMS
On-Site Training of Maintenance Personnel
Warranty Enforcement Process

BASSETT ARMY REPLACEMENT HOSPITAL
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QUESTIONS ?

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THE END